PATENT CLAIMS

1.   A method for performing inter-vehicle distance control on a vehicle, in which an actual value (d_{act}) of a distance variable which describes a distance between the vehicle and a vehicle traveling in front is determined and in which a plurality of weighting values (g_i) for the distance variable are determined as a function of input variables (x_i) which describe the driving situation of the vehicle and/or the ambient situation of the vehicle and/or the driving behavior of the driver, the weighting values (g_i) being combined in a first computing step to form a combined value (f) for the distance variable from which combined value (f) in turn a set point value (d_{setp}) for the distance variable is determined, braking means (50) and/or driving means (33) of the vehicle being actuated in such a way that the determined actual value (d_{act}) of the distance variable assumes the determined set point value (d_{setp}) of the distance variable,

characterized

in that in a second computing step the combined value (f) is restricted to a predefined value range, the set point value (d_{setp}) of the distance variable being determined from the combined value (f) which is restricted if appropriate.

2.   The method as claimed in claim 1,

characterized

in that the combination of the weighting values (g_i) is a multiplicative operation.

3.   The method as claimed in claim 2,

characterized

in that the multiplicative operation is the geometric average of the weighting values (g_i).

4.   The method as claimed in claim 1,

characterized

in that the value range is defined by predefining an upper and a lower limiting value (f_{min}, f_{max}) for the combined value (f), the limiting values (f_{min}, f_{max}) being predefined as a function of driving state variables which describe the driving state of the vehicle.

5.   The method as claimed in claim 1,

characterized

in that the combined value (f) for determining the set point value (d_{setp}) of the distance variable is multiplied by a predefined reference value (d_{ref}) for the distance variable, the reference value (d_{ref}) being predefined as a function of driving state variables which describe the driving state of the vehicle.

6.   The method as claimed in claim 4,

characterized

in that a driver warning is issued to the driver of the vehicle if the determined actual value (d_{act}) of the distance variable drops below the set point value (d_{setp}) of the distance variable which is given by the lower limiting value (f_{min}) of the combined value (f).

7.   A device for performing inter-distance control on a vehicle, in which an evaluation unit (31) determines an actual value (d_{act}) of a distance variable which describes a distance between the vehicle and a vehicle traveling in front, and in which the evaluation unit (31) determines a plurality of weighting values (g_i) for the distance variable as a function of input variables (x_i) which describe the driving situation of the vehicle and/or the ambient situation of the vehicle and/or the driving behavior of the driver, the evaluation unit (31) combining the weighting values (g_i) in a first computing step to form a combined value (f) for the distance variable, from which combined value (f) the evaluation unit (31) in turn determines a set point value (d_{setp}) for the distance variable, the evaluation unit (31) actuating braking means (50) and/or driving means (33) of the vehicle in such a way that the determined actual value (d_{act}) of the distance variable assumes the determined set point value (d_{setp}) of the distance variable,

characterized

in that in a second computing step the evaluation unit (31) restricts the combined value (f) to a predefined value range, the evaluation unit (31) determining the set point value (d_{setp}) of the distance variable from the combined value (f) which is restricted if appropriate.